



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,522	07/24/2001	William J. Bushee	21-0851	4232

40158 7590 06/15/2005

LEONARD & PROEHL, PROF. L.L.C.
3500 SOUTH FIRST AVENUE CIRCLE
SUITE 250
SIOUX FALLS, SD 57105

EXAMINER

CHEN, CHONGSHAN

ART UNIT PAPER NUMBER

2162

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,522

Applicant(s)

BUSHEE ET AL.

Examiner

Chongshan Chen

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to Amendment filed on 14 March 2005. Claims 1-20 are pending in this Office Action.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it **exceeds 150 words** limit.
4. The word "said", on lines 12-15 and 17-20, incorporates **legal phraseology** from claim language.
5. Correction is required. See MPEP § 608.01(b).
6. Applicant is reminded to update the application serial Number for the co-pending application.

The textual portion of the specification is incomplete as the specification lacks required data (i.e., page 2, line 20) which requires any, and all, related United States Patent Applications (i.e. 09/911,452) along with the current status (i.e., "still pending", "now abandoned", "now United States Patent 1,234,567 (use correct numerical values), etc...).

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-14 and 16-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV. B.2. (b)

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

Claims 1-14 and 16-20, in view of the above cited MPEP section, are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. The use of a computer has not been indicated.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2162

10. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitation "said plurality of subject areas" in line 11. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 1 recites the limitation "the user" in line 12. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 3 recites the limitation "said plurality of candidate databases" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 3 recites the limitation "said each one of said subject areas" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 4 recites the limitation "the qualification of databases" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

16. Claim 15 recites the limitation "the two-way flow of information" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

17. Please correct all other lack of antecedent basis problems in other claims.

18. Claims 8 recites "analyzing an initial page from each one of said plurality of qualified database for formatting; determining an input location for passing queries by said initial page to each one of said plurality of databases; determining results location for capturing search results returned from each one of said plurality of databases". The initial page is just one of the data record in the qualified database. It is unclear how the initial page in the qualified database could determining an input location or results location. The input location or result location should be

Art Unit: 2162

determined by the interface associated with the search engine, not determined by the data record in the database. Claims 17 and 18 are rejected for the same reason.

19. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim limitation "qualifying a portion of said selected databases based upon said aggregate score to be polled for content". Appropriate corrections are required, however, no new matter could be added to the specification.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 1, 8, 9, 12, 13 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com).

As per claim 1, Wu teaches a method for the automatic harvesting and qualification of dynamic database content comprising:

obtaining an initial categorization structure for organizing a plurality of subject areas of information (Wu, Fig. 2);

obtaining a plurality of parametric information lists for optimizing operation to a user's requirements (Wu, Fig. 3, col. 6, lines 10-21);

obtaining a query from the user, said query being associated with a subject area (Wu, col. 6, lines 61-67);

submitting said query (Wu, col. 6, line 61 - col. 7, line 5);

acquiring a collection of responsive content (Wu, Fig. 1, element 30, issues a search request, element 32, retrieves search result);

indexing said responsive content to form an index of facilitating searching said collection of responsive content (Wu, Fig. 3, element 22, word index, col. 3, lines 10-21);

publishing a summary of said collection of responsive content for review by the user (Wu, Fig. 5).

Wu discloses obtaining a list of categories and submitting the query to a qualified category. However, Wu does not explicitly disclose obtaining a candidate database listing having a plurality of databases each having a collection of content; and acquiring a listing of a plurality of qualified databases from said candidate database listing by matching each one of a candidate databases to said plurality of subject areas; submitting said query to said plurality of qualified databases. CSA teaches obtaining a candidate database listing having a plurality of databases each having a collection of content; and acquiring a listing of a plurality of qualified databases from said candidate database listing by matching each one of a candidate databases to said plurality of subject areas; submitting said query to said plurality of qualified databases

Art Unit: 2162

(CSA, Databases & Collections). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the search system of Wu by providing a list of candidate databases and submitting the query to a qualified database as disclosed by CSA. The motivation being to limit the search in the related area/database to improve the search time.

As per claim 8, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach analyzing an initial page from each one of said plurality of qualified database to formatting; determining an input location for passing queries by said initial page to each one of said plurality of databases; determining results locations for capturing search results returned from each one of said plurality of databases; recording said input location and said result locations for use in formatting queries for each one of said databases (Wu, Fig. 5).

As per claim 9, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach comparing each piece of responsive content to each one of said subject areas in said initial categorization structure (Wu, col. 5, lines 1-14); matching each piece of responsive content to subject areas based on relevance of the responsive content to the subject areas (Wu, col. 5, lines 1-14); filtering matches to optimize said categorization structure (Wu, col. 5, lines 1-14).

As per claim 12, Wu and CSA teach all the claimed subject matters as discussed in claim 9, and further teach creating a categorization file for recording matches between each piece of responsive content and each subject area; saving said categorization file to a storage medium for use in searching said collection of responsive content (Wu, Fig. 2 and 5, CSA, Databases & Collections).

Art Unit: 2162

As per claim 13, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach obtaining a stop list providing a list of words not to be indexed (Wu, col. 6, lines 19-22); parsing each piece of responsive content into constituent words (Wu, col. 6, line 10 - col. 7, line 67); eliminating words of said responsive content occurring on said stop lists (Wu, col. 6, lines 61-67); recording a location of every occurrence of constituent words in said collection of responsive content (Wu, col. 8, line 52 - col. 9, line 8).

Claim 16 is rejected on grounds corresponding to the reasons given above for claim 1.

Claims 17 and 18 rejected on grounds corresponding to the reasons given above for claim 8.

As per claim 19, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach wherein said step of acquiring a listing of a plurality of qualified databases further comprises acquiring a listing of a plurality of qualified databases each generating dynamic responses based upon a user query (CSA, Databases & Collections).

As per claim 20, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach generating at least one summary comprising at least one extract of relevant content taken directly from an associated at least one item in said collection of responsive content from said plurality of qualified databases (Wu, Fig. 5).

23. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) and further in view of Ferguson et al. ("Ferguson", US 6,237,011 B1).

As per claim 2, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teach obtaining a stop list providing a plurality of terms to be excluded for said

Art Unit: 2162

step of indexing said responsive content (Wu, col. 6, lines 10-21). However, neither Wu nor CSA teaches obtaining an exclusion list providing a plurality of terms and sources to inhibit associations for said step of acquiring a collection of responsive content; obtaining an inclusion list providing a plurality of terms and sources restricting associations for said step of acquiring a collection of responsive content.

Ferguson teaches obtaining an exclusion list providing a plurality of terms and sources to inhibit associations for said step of acquiring a collection of responsive content; obtaining an inclusion list providing a plurality of terms and sources restricting associations for said step of acquiring a collection of responsive content (Ferguson, col. 9, lines 1-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu and CSA's combined system by incorporating an exclusion list and an inclusion list as disclosed by Ferguson. The motivation being to retrieve the most relevant results.

Claim 11 is rejected on grounds corresponding to the reasons given above for claim 2.

24. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) and further in view of Marks et al. (hereinafter "Marks", US 2002/0007374 A1).

As per claim 3, Wu and CSA teach all the claimed subject matters as discussed in claim 1, and further teaches selecting databases according to relevance to said subject areas; associating said selected databases with said subject area (CSA, Databases & Collections). However, neither Wu nor CSA explicitly teaches capturing an initial page from each one of said plurality of candidate databases; evaluating said initial page for relevancy to said each one of said subject areas. Marks teaches capturing an initial page from each one of said plurality of

Art Unit: 2162

candidate databases; evaluating said initial page for relevancy to said each one of said subject areas (Marks, page 5, [0050]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu and CSA's combined system by incorporating the evaluating mean as disclosed by Marks. The motivation being to determine which subject area is the database associated with.

25. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) in view of Marks et al. (hereinafter "Marks", US 2002/0007374 A1) and further in view of Kirsch et al. (hereinafter "Kirsch", US 6,018,733).

As per claim 4, Wu, CSA and Marks teach all the claimed subject matters as discussed in claim 3, except for explicitly disclosing obtaining a database relevancy parameter for restricting the qualification of databases below a minimum threshold value; comparing the relevance of each initial page to said relevancy parameter; removing each candidate database with a relevancy below said minimum threshold value from qualification. Kirsch teaches obtaining a database relevancy parameter for restricting the qualification of databases below a minimum threshold value; comparing the relevance of each initial page to said relevancy parameter; removing each candidate database with a relevancy below said minimum threshold value from qualification (Kirsch, col. 4, lines 37-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu, CSA and Marks' combined system by selecting qualified databases as disclosed by Kirsch. The motivation being to submit the query to the qualified databases with related subject area in order to improve the search efficiency and search time.

As per claim 5, Wu, CSA and Marks teach all the claimed subject matters as discussed in claim 3, and further teach submitting a query to each of said selected databases; capturing a plurality of pieces of responsive content provided by each of said selected databases (CSA, Databases & Collections); evaluating each of said plurality of pieces of responsive content for relevancy to said query; assigning a numerical score to each one of said plurality of pieces of responsive content, said numerical score representing a degree of relevance to said query (Wu, col. 6, lines 41-67). Wu, CSA and Marks do not explicitly disclose developing an aggregate score for each one of said selected databases; qualifying a portion of said selected databases based upon said aggregate score to be polled for content. Kirsch teaches developing an aggregate score for each one of said selected databases; qualifying a portion of said selected databases based upon said aggregate score to be polled for content (Kirsch, col. 4, lines 38-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu, CSA and Marks' combined system by developing an aggregate score and qualifying a portion of said selected databases as disclosed by Kirsch. The motivation being to efficiently retrieve query results.

26. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) in view of Marks et al. (hereinafter "Marks", US 2002/0007374 A1) in view of Kirsch et al. (hereinafter "Kirsch", US 6,018,733) and further in view of Christal et al. (hereinafter "Christal", Pub. No.: US 2001/0056414 A1).

As per claim 6, Wu, CSA, Marks and Kirsch teach all the claimed subject matters as discussed in claim 5, and further teach obtaining an initial weighting of each of said pieces of responsive content from said selected database; selecting a quantity of pieces of responsive

Art Unit: 2162

content such that pieces of responsive content with a relatively greater initial weighting are selected before pieces of responsive content with a relatively lesser initial weighting (Wu, col. 6, lines 41-67). Wu, CSA, Marks and Kirsch do not explicitly disclose obtaining a content parameter limiting the number of pieces of content to be captured from each of said selected databases. Christal teaches obtaining a content parameter limiting the number of pieces of content to be captured from each of said selected databases (Christal, page 6, [0067]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu, CSA, Marks and Kirsch's combined system by limiting the number of results to be captured as disclosed by Christal. The motivation being to retrieve the most relevant search result and improve the search efficiency.

Claim 7 is rejected on grounds corresponding to the reasons given above for claims 3-6.

27. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) and further in view of Redfern (US 6,078,914).

As per claim 10, Wu and CSA teach all the claimed subject matters as discussed in claim 9, and further teaches obtaining a population parameter for limiting a number of pieces of responsive content which may be matched to any one subject area (Wu, col. 12, lines 45-53); obtaining an occurrence parameter for limiting a number of subject areas to which any one piece of responsive content may be matched (Wu, col. 12, lines 45-53); restricting matches for each one of said subject areas according to said occurrence parameter and said population parameter (Wu, col. 12, lines 45-53). Neither Wu nor CSA explicitly discloses removing duplicate pieces of responsive content. Redfern teaches removing duplicate pieces of responsive content (Redfern, col. 2, lines 65-67). Therefore, it would have been obvious to one of ordinary skill in

Art Unit: 2162

the art at the time the invention was made to modify the Wu and CSA's combined system by removing duplicate pieces as disclosed by Redfern. The motivation being to prevent redundancy in displaying the search result.

28. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,553,364) in view of CSA (www.csa.com) and further in view of Kirsch et al. (hereinafter "Kirsch", US 6,018,733).

As per claim 14, Wu and CSA teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing determining if a summary is provided for each piece of said responsive content; examining each piece of said responsive content for keywords associated with each subject area; developing a keyword summary score for each piece of responsive content; examining each piece of said responsive content for relevant extracts forming an extract summary; developing an extract score for each piece of responsive content; comparing said keyword summary score to said extract score for a summary composite score; selecting said keyword summary if a predetermined summary value is exceeded by said summary composite score; selecting said extract summary if a predetermined summary value if not exceeded by said summary composite score. Kirsch teaches determining if a summary is provided for each piece of said responsive content; examining each piece of said responsive content for keywords associated with each subject area; developing a keyword summary score for each piece of responsive content; examining each piece of said responsive content for relevant extracts forming an extract summary; developing an extract score for each piece of responsive content; comparing said keyword summary score to said extract score for a summary composite score; selecting said keyword summary if a predetermined summary value is exceeded by said

Art Unit: 2162

summary composite score; selecting said extract summary if a predetermined summary value if not exceeded by said summary composite score (Kirsch, col. 5, lines 47-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wu and CSA's combined system by incorporating a summary as disclosed by Kirsch. The motivation being to improve the search efficiency and identify the most relevant search results.

29. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Redfern (US 6,078,914) in view of Christal et al. (hereinafter "Christal", Pub. No.: US 2001/0056414 A1).

As per claim 15, Redfern teaches a system for the automatic harvesting and qualification of dynamic database content comprising:

a computer system having a communication means for communicating with at least one other computer including a database to facilitate the two-way flow of information between said computer system and the at least one other computer (Redfern, col. 4, lines 8-27);

said computer system having a storage means for retention and recall of data communicated by or to the at least one other computer (Redfern, col. 4, lines 8-27);

said computer system having a processing means for executing multiple software modules and performing comparisons between a user supplied query and a plurality of documents found in at least one other computer (Redfern, col. 4, lines 8-33);

an index for storing a plurality of pre-approved internet sites to be included in a series of queries (Redfern, col. 29, lines 34-35);

a configuration module adapted for translating a generic query into site-specific dialects such that a single user defined query may be directed to multiple sites automatically (Redfern, Abstract, col. 4, lines 8-33);

a selection module adapted for characterizing said plurality of documents returned by the database of the at least one other computer and associated with said user defined query (Redfern, col. 2, line 47 – col. 3, line 45);

a generator module for automatically generating at least one results page for the user conveying information associated with any one of said plurality of documents associated with said query (Redfern, col. 2, line 47 – col. 3, line 45).

Redfern does not explicitly a results index to allow for rapid recovery of specific portions of any one of said plurality of documents characterized by said selection module. Christal teaches a results index to allow for rapid recovery of specific portions of any one of said plurality of documents characterized by said selection module (Christal, page 1, [0009]-[0012]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Redfern by incorporating the results index as discloses by Christal. The motivation being to allow for rapid recovery of specific portions of any one of said plurality of documents.

Response to Arguments

30. As per applicant's arguments regarding the references do not teach an exclusion list and an inclusion list providing a plurality of terms and sources have been considered but are not persuasive. Ferguson teaches obtaining an exclusion list and an inclusion list relating to

Art Unit: 2162

documents (Ferguson, col. 9, lines 1-15). The examiner interprets the claimed "sources" as document. Therefore, the Ferguson reads on the claimed invention.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031.

The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen
June 12, 2005


JEAN M. CORRIELUS
PRIMARY EXAMINER